English perspective on managing badgers in embankments

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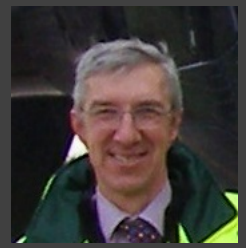
Jun 2021



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Tidal Surge Dec 2013 – Tetney Marshes

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Survey of known badger setts

Appendix Two: Badger Survey Check Sheet

Name: ……Date: ……

Watercourse: ……

NGR: ……

Survey length:…… ……

Location and description: ……

……

Photographs taken:

Bank:

Left [ ] Right [ ]

Embankment [ ] Channel [ ] Soak Dyke [ ]

Number of Holes

	Riverward	Crest	Landward
Top 1/3			
Middle 1/3			
Lower 1/3			

Measurements

Vertical drop from crest to base of lowest hole (mm)	Riverward:_____	Vertical drop from unaffected crest to settled crest (mm):
	Landward:_____	_____

Vegetation

Under bushes [ ]

Nearby Habitat feature:

Hedge [ ] Woodland [ ] Shrubs [ ]

Surrounding area (area at risk):

Farmland [ ] Isolated Properties [ ] Urban [ ]

Farmland infrastructure [ ] Properties [ ]

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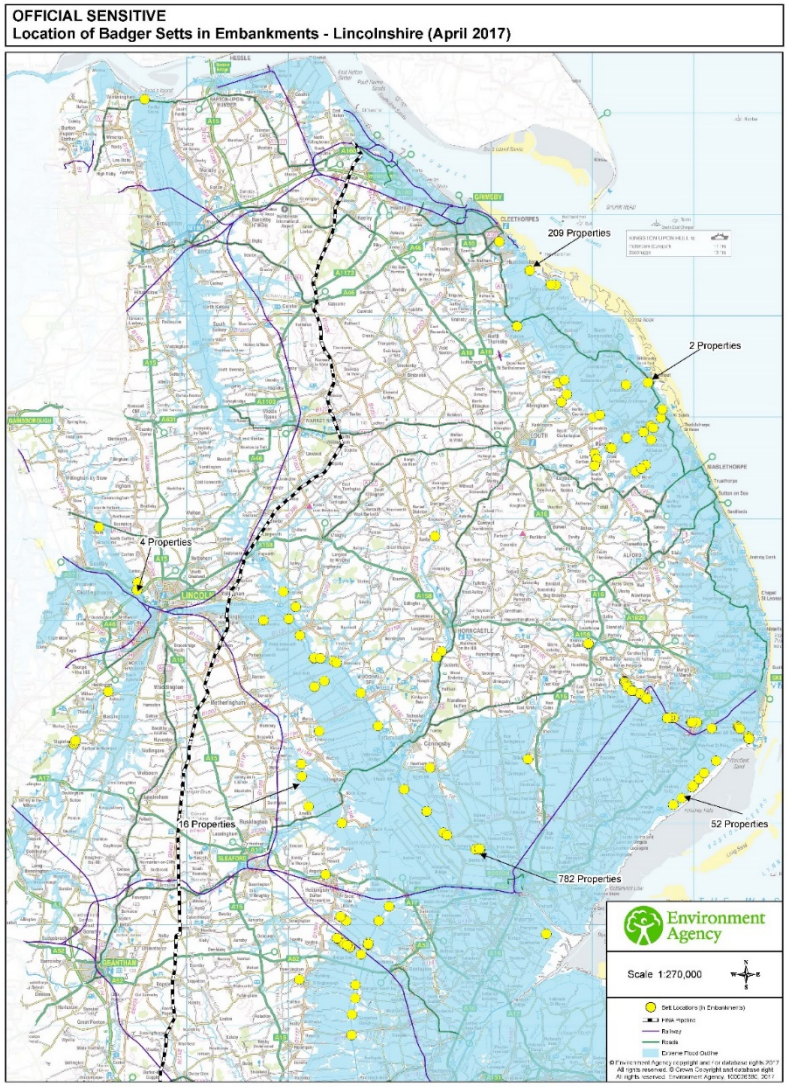
Badger Setts in embankments



Type of sett	Number
Main	27
Annex	13
Subsidiary	9
Outliers	26
Unknown	18
TOTAL	93

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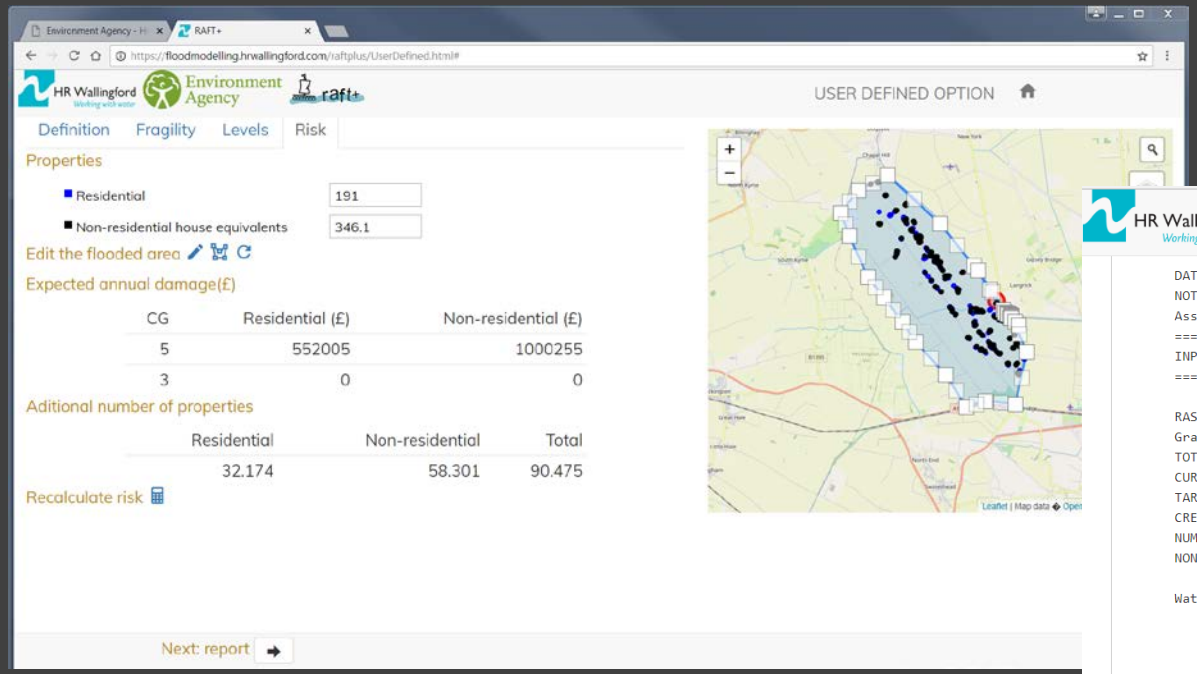
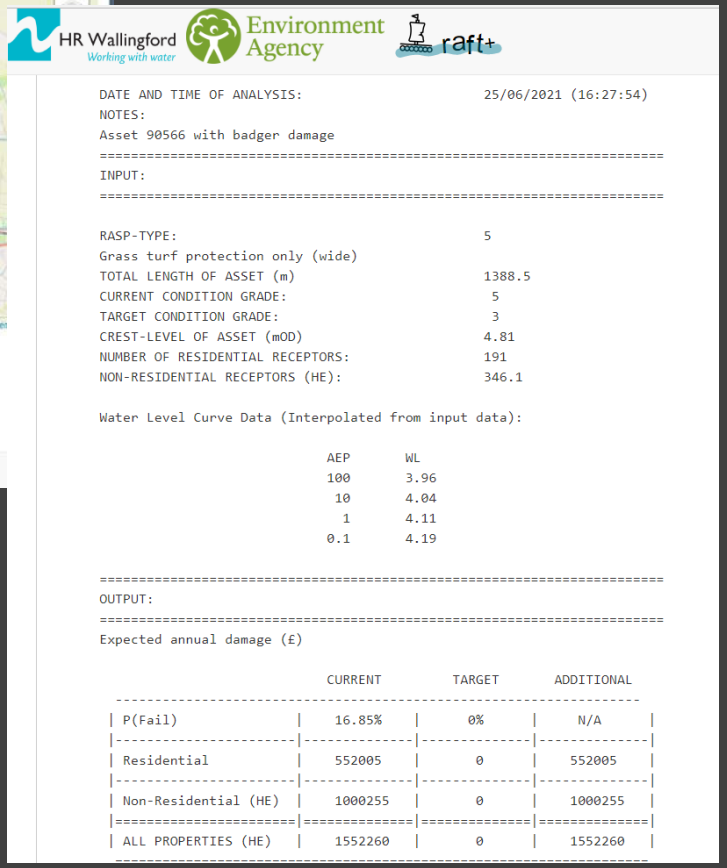
Post Inspection process





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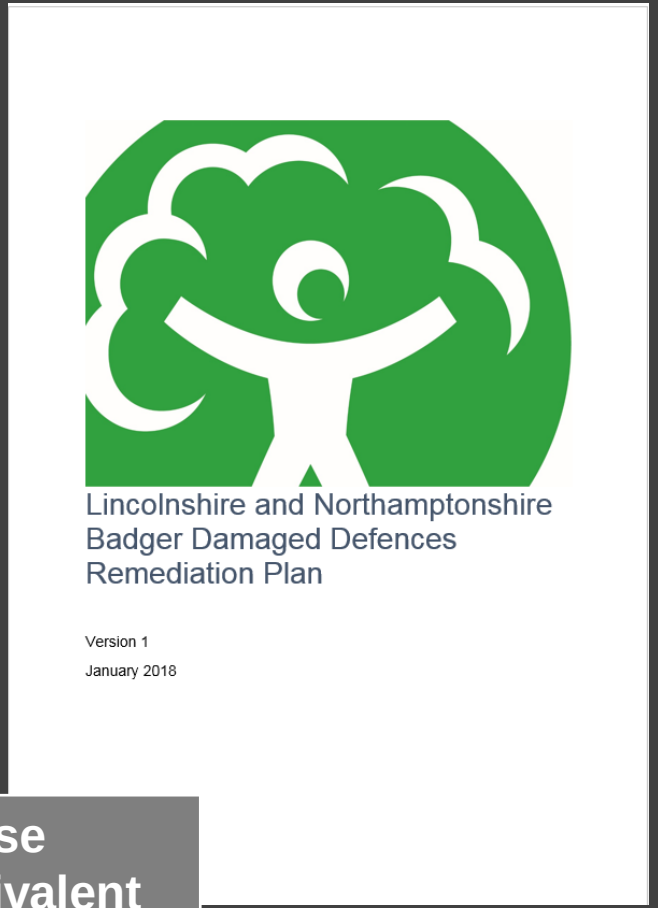
Remediation Plan



Year 18/19	Assets below required condition	No of badger entrances	House Equivalent at risk
Start of year	55	342	8360
Fixed in year	16	106	8132
% reduction	29	31	97

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New Operational Instruction: Badgers in FCRM Assets

We have published a new OI, called "Managing badgers and badger setts in FCRM Assets" (Ref: 260_10).

It outlines our approach in balancing the need to maintain our flood defences, with the need to protect badgers and their habitats.

You can find the new OI on Easinet by searching for "Badgers".

For more information, contact **Cathy Turtle** or **Johnny Lyttle**.

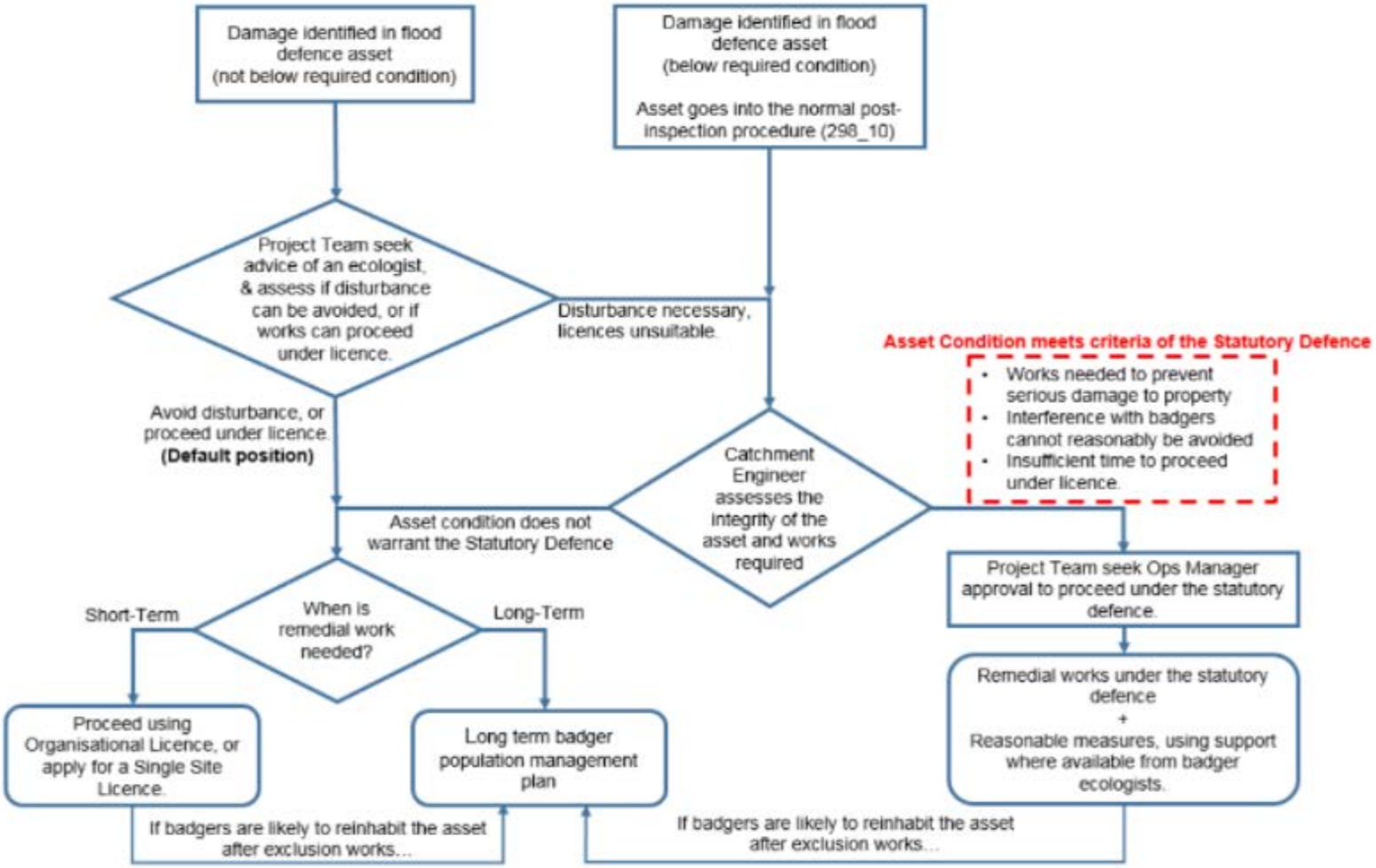

Figure 1: High-Level summary of our procedures for managing badgers in FCRM assets, particularly when there is a potential need for works to proceed under the Statutory Defence.

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Artificial Setts adjacent to embankment

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Artificial Setts within embankment

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Case Study- Langrick Badger Sett, Site Photos

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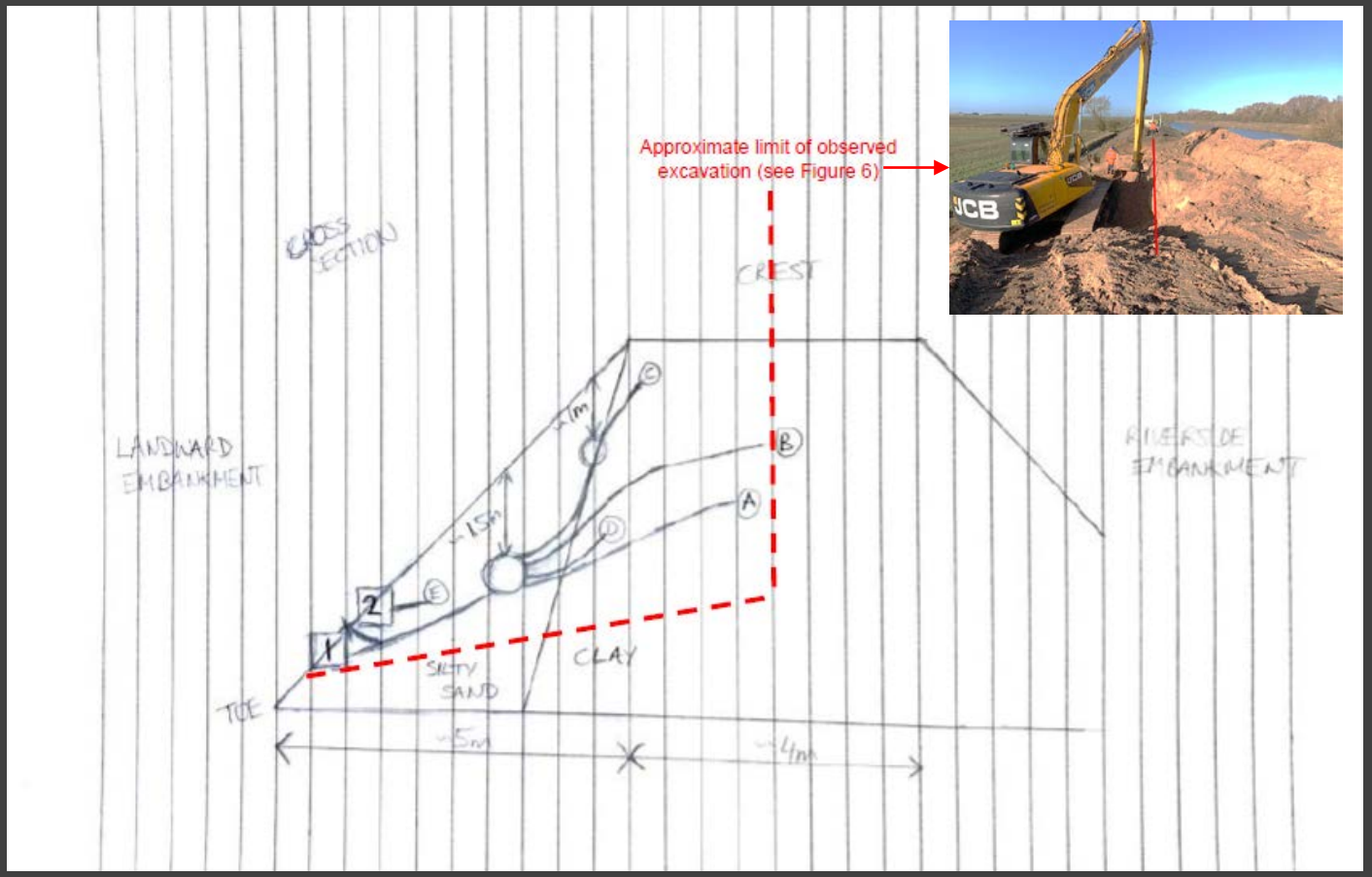
Site Sketch – Cross Section



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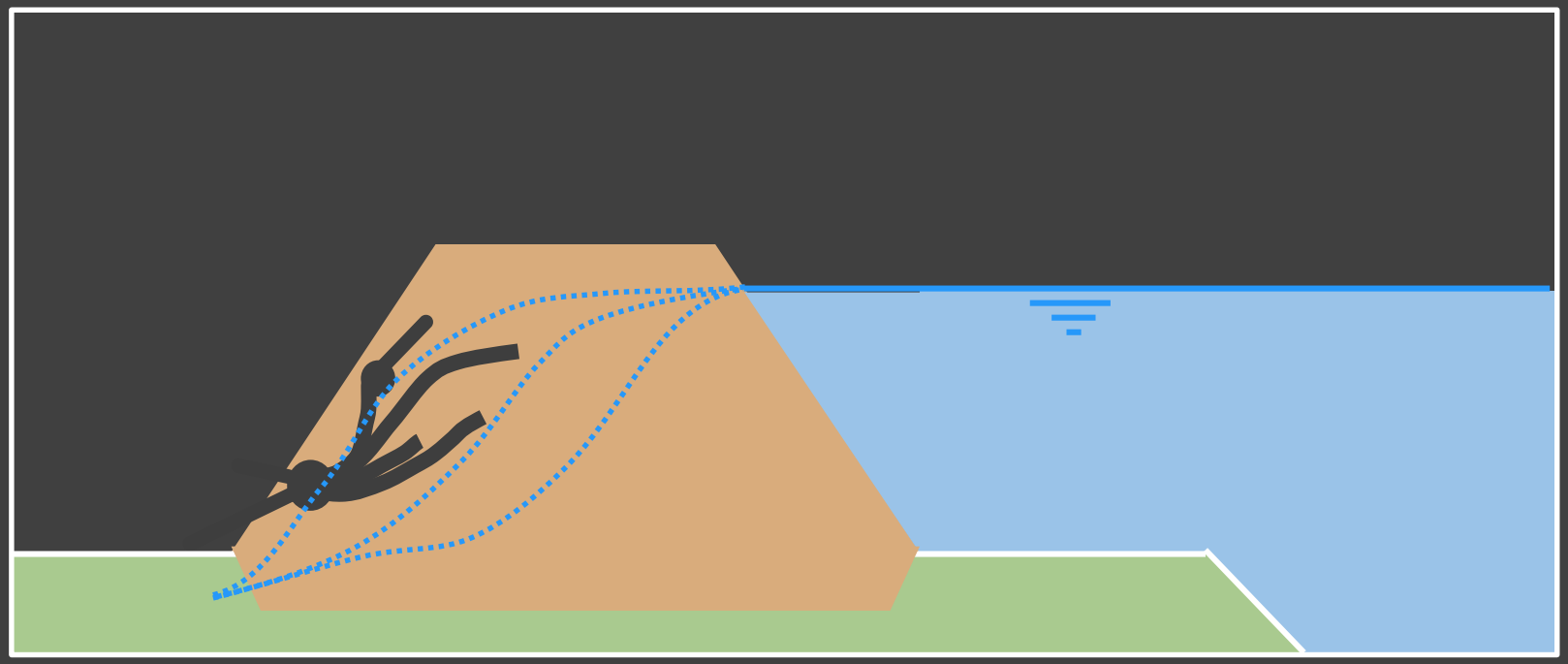
Piping Failure Animation



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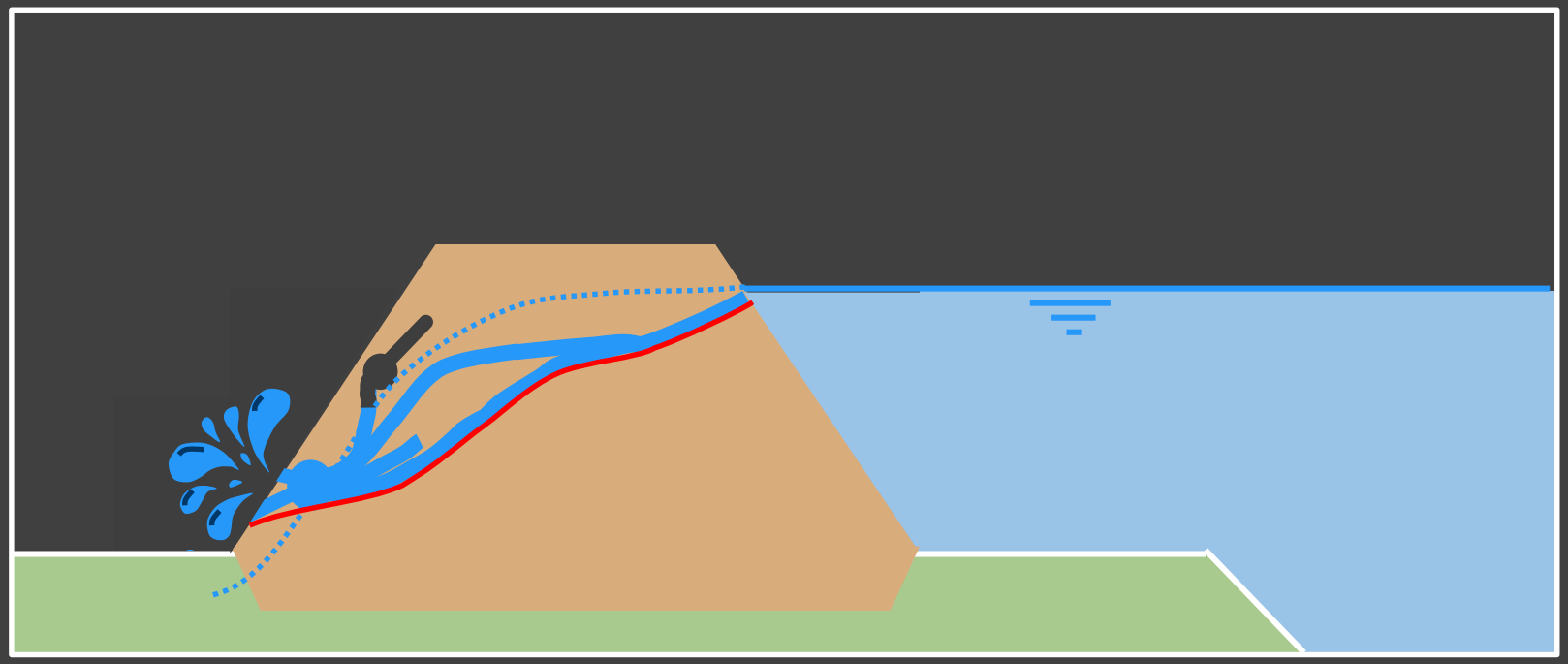
Piping Failure Animation



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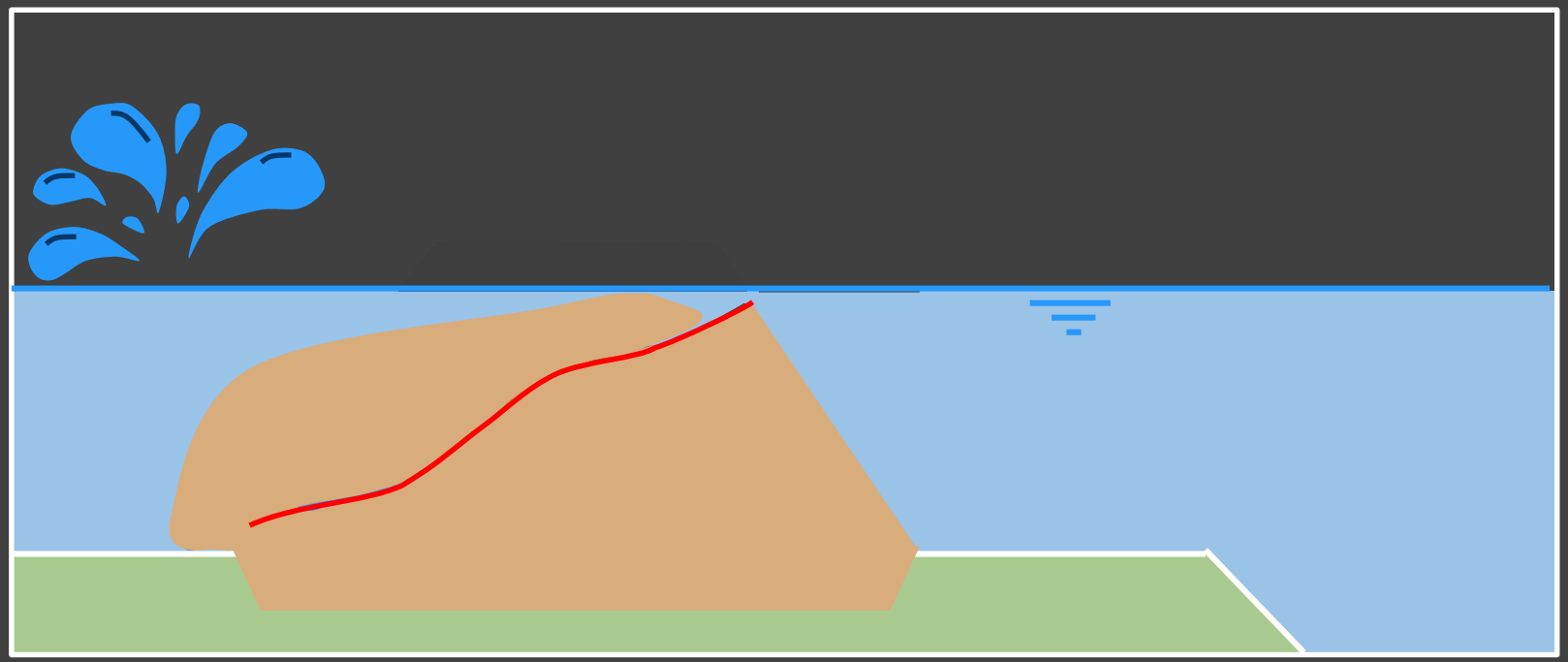

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Reflections

1. Ecological surveys, creation of suitable habitat, licence applications and construction works all have time constraints which require careful planning.

2. Maintenance programmes should include for shrub clearance to the toe of the embankment both to discourages badgers but also enable early identification of badger activity by asset inspectors.

3. Artificial setts have a success rate of around 67%

4. Even where artificial setts are inhabited, our embankments provide attractive habitat and require early closure of outlier setts to prevent them becoming main setts.

5. Where the embankment has increased resilience due to it’s width or type of construction it may be appropriate to monitor the badgers in their existing location.

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